

Abstract

The present invention provides for a condensate polisher system that comprises a feed water flow that enters one or more deep bed condensate polishers. These deep bed condensate polishers contain ion resin beads that exchange a single ion type, typically cation resin for power generation systems. The feed water passing through the deep bed condensate polishers has a substantial portion, and even all of the cations in solution removed. This produces a semi-purified water flow that is then fed into one or more powdered resin polishers. The powdered resin polishers, which contain mixed powdered ion exchange resins or single type powdered resins depending on the nature of the semi-purified water flow, then finish the purification process on the water, producing a purified water flow.